

Amendments to the Claims:

The following is a complete list of claims, replacing all prior versions of the claims in the application:

1 **Claim 1 (currently amended):** An optical lens obtained by a process which comprises the steps
2 of:

3 mixing together an optically clear dead ~~polymer and polymer~~, a reactive plasticizer in an
4 amount to render the composition semi-solid and malleable, ~~and, optionally, an initiator~~ to form
5 a semi-solid polymerizable composition, wherein the semi-solid polymerizable composition
6 remains optically clear and exhibits less than about 5% low shrinkage upon polymerization;

7 shaping the semi-solid composition into a desired geometry; and

8 exposing the semi-solid composition to a source of polymerizing energy;

9 to give the resultant optically clear lens comprising a crosslinked polymer network of reactive
10 plasticizer within an entangled dead polymer.

1 **Claim 2 (original):** An optical lens according to claim 1 wherein the dead polymer and the
2 reactive plasticizer exhibit compatibility at temperatures not higher than 100°C.

1 **Claim 3 (currently amended):** An optical lens formed from a semi-solid polymerizable
2 composition that comprises a mixture of i) a dead polymer derived from monomers that cannot
3 be polymerized in less than 10 minutes in a mold under UV ~~exposure and exposure~~, ii) a reactive
4 plasticizer in an amount to render the composition semi-solid and malleable, the reactive
5 plasticizer having a refractive index that closely matches the refractive index of the dead polymer
6 and being capable of forming a crosslinked network when polymerized, ~~and iii) optionally, an~~
7 ~~initiator~~, the dead polymer and reactive plasticizer exhibiting compatibility at temperatures not
8 higher than 100°C; and wherein the polymerizable composition is capable of polymerizing in
9 less than 10 minutes in a mold under UV exposure, and wherein when polymerized the
10 polymerizable composition exhibits an optical clarity of at least 85% at 2 mm thickness, a

refractive index of at least 1.5, a glass transition temperature of at least 80°C, a modulus of elasticity greater than 10^9 dynes/cm², a Shore D hardness greater than 80, and an Abbe number greater than 25.

Claim 4 (original): An optical lens according to claim 3 which comprises a semi-interpenetrating crosslinked polymer network of reactive plasticizer within an entangled dead polymer.

Claim 5 (original): An optical lens according to claim 3 wherein the polymer network of reactive plasticizer is further crosslinked to the dead polymer.

Claim 6 (original): An optical lens according to claim 3 which comprises interpenetrating reactive plasticizer polymeric chains within an entangled dead polymer.

Claim 7 (original): An optical lens according to claim 3 which is impact-resistant.

Claim 8 (canceled)

Claim 9 (original): An optical lens according to claim 3 which exhibits dimensional stability.

Claim 10 (currently amended): An optical lens according to claim 3 wherein the dead polymer is selected from the group consisting of polystyrenes, polysulfones, polyacrylates, ~~polymethacrylates, poly(meth)acrylates,~~ polycarbonates, polyolefins, polyurethanes, copolymers and block copolymers.

Claim 11 (original): An optical lens according to claim 3 which is an ophthalmic lens.

Claim 12 (original): An optical lens according to claim 3 which is a contact lens.

Claim 13 (currently amended): An optical lens according to claim 3 wherein the reactive plasticizer comprises reactive functional groups selected from the group consisting of acrylate, methacrylate, acrylic anhydride, acrylamide, vinyl, vinyl ether, vinyl ester, vinyl halide, vinyl silane, vinyl siloxane, ~~acrylated silicones, methacrylated silicones, (meth)acrylated silicones,~~

5 vinyl heterocycles, diene, allyl, epoxies, epoxies with hardeners, epoxies (with hardeners) and
6 urethanes.

1 **Claim 14 (currently amended):** An optical lens formed from a semi-solid polymerizable
2 composition comprising an optically clear dead polymer and polymer, a reactive plasticizer in an
3 amount to render the composition semi-solid and malleable, ~~and, optionally, an initiator~~, wherein
4 the semi-solid polymerizable composition remains optically clear and exhibits less than about
5 5% low shrinkage upon polymerization.

1 **Claim 15 (original):** An optical lens according to claim 14 which is an ophthalmic lens.

1 **Claim 16 (original):** An optical lens according to claim 14 which is a contact lens.

1 **Claim 17 (original):** An optical lens according to claim 14 wherein the dead polymer and the
2 reactive plasticizer exhibit compatibility at temperatures not higher than 100°C.

1 **Claim 18 (currently amended):** An optical data storage disk ~~A shaped article~~ formed from a
2 semi-solid polymerizable composition comprising a dead polymer, a reactive plasticizer in an
3 amount to render the composition semi-solid and malleable, and an initiator, the dead polymer
4 and reactive plasticizer exhibiting compatibility at temperatures not higher than 100°C, and
5 wherein the semi-solid polymerizable composition exhibits less than about 5% low shrinkage
6 upon polymerization.

1 **Claim 19 (canceled)**

1 **Claim 20 (canceled)**

1 **Claim 21 (new):** An optical lens according to claim 1 in which said process further comprises
2 mixing an initiator together with said optically clear dead polymer and said reactive plasticizer.

1 **Claim 22 (new):** An optical lens according to claim 3 in which said composition further
2 comprises an initiator.

- 1 **Claim 23 (new):** An optical lens according to claim 14 in which said composition further
2 comprises an initiator.